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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,269	03/03/2004	Hyun-Jei Chung	1568.1086	8941
49455	7590	05/26/2010	EXAMINER	
STEIN MCEWEN, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON, DC 20005			HODGE, ROBERT W	
			ART UNIT	PAPER NUMBER
			1795	
			NOTIFICATION DATE	DELIVERY MODE
			05/26/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptomail@smiplaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/791,269	<b>Applicant(s)</b> CHUNG ET AL.	
	<b>Examiner</b> ROBERT HODGE	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,8 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,8 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 2/18/10 have been fully considered but they are not persuasive. Applicants speculate the shape of the tabs that extend inside and outside of the battery case and improperly refer to 122 as a sealing surface. Claim 1 recites "the electrode tabs extend from the positive and negative electrode plates, through the case, and are then bent only once...". Claim 1 only recites that the tabs are bent after they extend out of the case and therefore applicants' arguments that speculate the shape of the tab inside the case of Jeong are not commensurate with the scope of the claims. As has been stated several times to applicants it is quite clear that the portion of the tabs extending outside of the sealing portion 300 are only bent once. This is actually admitted to by applicants in their remarks dated 2/18/10, that is the tabs are only bent once after they extend outside of 300. Furthermore Jeong defines 122 as a "lower part" not a sealing surface and Jeong defines 300 as a resin for sealing the case, therefore 300 relates to the sealing surface as recited in claim 1 since that is where the sealing occurs.

With regards to AAPA applicants state that if the electrode tabs of AAPA were bent only once at a substantially right angle, the electrode tabs would not be connected to the PCB because figure 2 shows the terminals facing downward. It appears that applicants are stating that the PCB of figure 2 is supposedly fixed in space and cannot be moved. The rejection is actually a relocation of parts and it is quite clear that a skilled artisan would understand that if the tabs extending outside of the case were bent

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only once, the skilled artisan would understand that the PCB would then be attached to the tabs in a different orientation than presented in figure 2 such that the PCB would be perpendicular to the sealing surface. A skilled artisan would in fact know where the tabs need to be attached to the PCB and orient the PCB accordingly to properly attach everything. And by doing so the function and operation of the battery would not be affected as has already been stated to applicants several times.

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

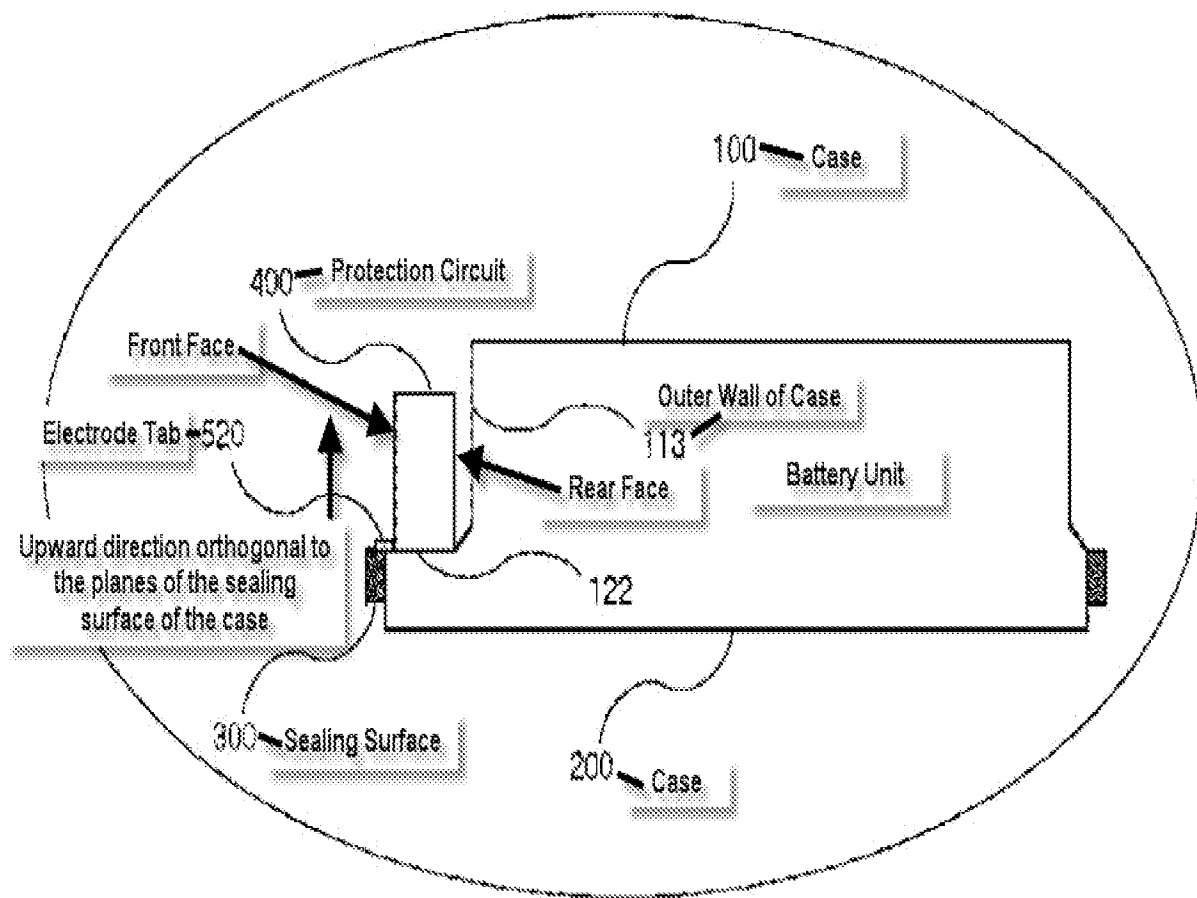
Claims 1, 2 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by KR 2002-0074550 hereinafter Jeong.

As seen in the cross-section D of figure 4 Jeong teaches a pouch-type lithium secondary battery comprising: a battery unit comprising: a positive electrode plate, a separator, and a negative electrode plate, wherein the separator is disposed between the positive and negative electrode plates; electrode tabs 510 and 520 extending from the positive and negative electrode plates of the battery unit; a case 100 and 200 having a space to accommodate the battery unit and a sealing surface 300 formed along the periphery of the space, a protection circuit board 400 having a front surface and an opposing rear surface and comprising electrode terminals disposed on the front surface, which are directly connected to the electrode tabs which extend through the case and are bent only once at a substantially right angle with respect to the planes of the sealing

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surfaces at a predetermined length in a thickness direction of the case without extending beyond a thickness of the case, wherein the protection circuit board is disposed between an outer wall of the case and the bent electrode tabs, wherein the electrode tabs are disposed parallel to the outer wall of the case in an upright position and are perpendicular to a contact surface at which the sealing surface is contacted and the electrode tabs connect to the protection circuit board on a side opposite to the outer wall of the case (pages 4 and 5 of the provided English machine translation and as illustrated below).

D



***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admitted Prior Art hereinafter AAPA.

As seen in figures 1 and 2 and described in paragraphs [0003]-[0015] of the instant specification, AAPA teaches a pouch type lithium secondary battery 10 comprising a battery unit 11 comprising a positive electrode plate 13, a negative electrode plate 14, a separator 15 disposed between the positive and negative electrode plates, electrode tabs 16 and 17 extending from the respective positive and negative electrode plates, a case 12 having space 12a to accommodate the battery unit, a sealing surface 12b along the periphery of the space, a protection circuit board 100 having a front and rear surface with electrode terminals 101 and 102 that are directly electrically connected to the electrode tabs, the protection circuit board is disposed in an approximately upward position with respect to the planes of the sealing surface of the case such that the rear surface faces the battery unit and the front surface faces away from the battery unit, wherein portions of each of the electrode tabs extend outside the case and are bent in an upward position with respect to a plane of the sealing surface, wherein the electrode tabs are bent at a predetermined length from a leading edge of the sealing surface in a thickness direction of the case, the electrode tabs further comprise insulating tape 18 between the electrode tabs and the sealing surface such

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that the insulating tape is wrapped around the portions of the electrode tabs bent from a leading edge of the sealing surface.

AAPA teaches the claimed invention except for bending the electrode tabs only once at a substantially right angle. It is noted that the orientation of the tabs will not effect the operation of the battery as a whole because the tabs will still be connected to the protection circuit board regardless of how they are bent and therefore it would have been obvious to one having ordinary skill in the art to bend the tabs only once at a substantially right angle since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong as applied to claim 1 above, and further in view of Applicants' Admitted Prior Art hereinafter AAPA.

Jeong does not teach insulating tape around the electrode tabs.

AAPA as discussed above is incorporated herein.

At the time of the invention it would have been obvious to one having ordinary skill in the art to wrap insulating tape around the electrode tabs of Jeong as taught by AAPA in order to increase the sealing efficiency of the battery. If a technique has been used to improve one device (wrapping insulating tape around the electrode tabs), and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way (increasing the sealing efficiency of the battery), using the technique is obvious unless its actual application is beyond his or her skill. See MPEP 2141 (III) Rationale C, KSR v. Teleflex (Supreme Court 2007).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT HODGE whose telephone number is (571)272-2097. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on (571) 272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert Hodge/  
Primary Examiner, Art Unit 1795